

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number 10534431

Filing Date 2006-01-24

First Named Inventor Andrew Barron

Art Unit 2815

Examiner Name Jerome Jackson, Jr.

Attorney Docket Number 1789-09703

**U.S.PATENTS**

Examiner Initial*	Cite No	Patent Number	Kind Code <sup>1</sup>	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	5274018		1993-12-28	Tanaka, et al.	
	2	5308661		1994-05-03	Feng, et al.	
	3	5416188		1995-05-16	Chiang, et al.	
	4	5420081		1995-05-30	Mattes, et al.	
	5	5648128		1997-07-15	Yeh, et al.	
	6	5690807		1997-11-25	Clark, Jr., et al.	
	7	5744399		1998-04-28	Rostoker, et al.	
	8	5908585		1999-06-01	Shibuta	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10534431
Filing Date		2006-01-24
First Named Inventor	Andrew Barron	
Art Unit	2815	
Examiner Name	Jerome Jackson, Jr.	
Attorney Docket Number	1789-09703	

	9	6080683		2000-06-27	Fauer, et al.	
	10	6126740		2000-10-03	Schulz, et al.	
	11	6203814	B1	2001-03-20	Fisher, et al.	
	12	6207229	B1	2001-03-27	Bawendi, et al.	
	13	6277766	B1	2001-08-21	Ayers	
	14	6333598	B1	2001-12-25	Hsu, et al.	
	15	6346136	B1	2002-02-12	Chen, et al.	
	16	6348295	B1	2002-02-19	Griffith, et al.	
	17	6559375	B1	2003-05-06	Meissner, et al.	
	18	6645455	B2	2003-11-11	Margrave, et al.	
	19	6683783	B1	2004-01-27	Smalley, et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number		10534431
Filing Date		2006-01-24
First Named Inventor	Andrew Barron	
Art Unit	2815	
Examiner Name	Jerome Jackson, Jr.	
Attorney Docket Number	1789-09703	

	20	6685986	B2	2004-02-03	Oldenburg, et al.	
	21	6710366	B1	2004-03-23	Lee, et al.	
	22	6770497	B2	2004-08-03	Ihm	
	23	6827918	B2	2004-12-07	Margrave, et al.	
	24	6835366	B1	2004-12-28	Margrave, et al.	
	25	6841139	B2	2005-01-11	Margrave, et al.	
	26	6875412	B2	2005-04-05	Margrave, et al.	
	27	6882094	B2	2005-04-19	Dimitrijevic, et al.	
	28	6918946	B2	2005-07-19	Korgel, et al.	
	29	6946597	B2	2005-09-20	Sager, et al.	
	30	6969897	B2	2005-11-29	Kim, II	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10534431
Filing Date	2006-01-24
First Named Inventor	Andrew Barron
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	1789-09703

31	6970239	B2	2005-11-29	Chan, et al.	
32	6992322	B2	2006-01-31	Narayan	
33	7253014	B2	2007-08-07	Barron, et al.	
34	7294248	B2	2007-11-13	Gao	

If you wish to add additional U.S. Patent citation information please click the Add button.

**U.S.PATENT APPLICATION PUBLICATIONS**

Examiner Initial*	Cite No	Publication Number	Kind Code <sup>1</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20020094699	A1	2002-07-18	Houng, et al.	
	2	20020110513	A1	2002-08-15	Margrave, et al.	
	3	20030234978	A1	2003-12-25	Garito, et al.	
	4	20040265209	A1	2004-12-30	Colbert, et al.	
	5	20050089684	A1	2005-04-28	Barron, et al.	

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10534431
Filing Date	2006-01-24
First Named Inventor	Andrew Barron
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	1789-09703

6	20080171204	A1	2008-07-17	Barron, et al.	
---	-------------	----	------------	----------------	--

If you wish to add additional U.S. Published Application citation information please click the Add button.

**FOREIGN PATENT DOCUMENTS**

Examiner Initial*	Cite No	Foreign Document Number <sup>3</sup>	Country Code <sup>2</sup> j	Kind Code <sup>4</sup>	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T <sup>5</sup>
	1	1246205	EP	A1	2002-10-02	ABB Research Ltd.		<input type="checkbox"/>
	2	2370408	GB	A	2002-06-26	Ihm		<input type="checkbox"/>
	3	08325195	JP		1996-12-10	NEC Corp.		<input type="checkbox"/>
	4	03043934	WO	A1	2003-05-30	William Marsh Rice University		<input type="checkbox"/>
	5	2004046023	WO	A2	2004-06-03	William Marsh Rice University		<input type="checkbox"/>
	6	2004046023	WO	A3	2004-06-03	William Marsh Rice University		<input type="checkbox"/>
	7	2005000735	WO	A2	2005-01-06	William Marsh Rice University		<input type="checkbox"/>
	8	2005000735	WO	A3	2005-01-06	William Marsh Rice University		<input type="checkbox"/>

If you wish to add additional Foreign Patent Document citation information please click the Add button

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10534431
Filing Date	2006-01-24
First Named Inventor	Andrew Barron
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	1789-09703

**NON-PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>5</sup>
	1	BALAVOINE, FABRICE, et al., "Helical crystallization of proteins on carbon nanotubes: a first step towards the development of new biosensors," Angew. Chem. Int. Ed, 1999, pgs. 1912-1915, Vol. 38, No. 13/14, Wiley-VCH Verlag GmbH.	<input type="checkbox"/>
	2	BRONIKOWSKI, MICHAEL J., et al., "Gas-phase production of carbon single-walled nanotubes from carbon monoxide via the HiPco process: a parametric study," Journal of Vacuum Science Technology, July/August 2001, pgs. 1800-1805, Vol. 19, No. 4, American Vacuum Society.	<input type="checkbox"/>
	3	CHEN, ROBERT J., et al., "Noncovalent sidewall functionalization of single-walled carbon nanotubes for protein immobilization," Journal of the American Chemical Society, 2001, pgs. 3838-3839, Vol. 123, No. 16, American Chemical Society.	<input type="checkbox"/>
	4	COLLINS, PHILIP G., et al., "Extreme oxygen sensitivity of electronic properties of carbon nanotubes," Science, March 10, 2000, pgs., 1801-1804, Vol. 287, www.sciencemag.org.	<input type="checkbox"/>
	5	DA ROS, TATIANA, et al., "Fullerene derivatives as potential DNA photoprobes," Australian Journal of Chemistry, 2001, pgs. 223-224 plus cover, Vol. 54, CSIRO Publishing, Australia.	<input type="checkbox"/>
	6	Foreign communication from a related counterpart application, International Search Report, PCT/US02/37211, March 10, 2003, 3 pgs.	<input type="checkbox"/>
	7	Foreign communication from a related counterpart application, International Search Report, PCT/US03/37188, December 21, 2004, 3 pgs.	<input type="checkbox"/>
	8	Foreign communication from a related counterpart application, International Preliminary Examination Report, PCT/US03/37188, September 30, 2005, 4 pgs.	<input type="checkbox"/>
	9	FU, QIANG, et al., "Selective coating of single wall carbon nanotubes with thin SiO <sub>2</sub> layer," Nano Letters, 2002, pgs. 329-332, Vol. 2, No. 4, American Chemical Society.	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10534431
Filing Date	2006-01-24
First Named Inventor	Andrew Barron
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	1789-09703

10	GIRIFALCO, L. A., et al., "Carbon nanotubes, buckyballs, ropes, and a universal graphitic potential," Physical Review B, November 15, 2000, pgs. 104-110, Vol. 62, No. 19, The American Physical Society.	<input type="checkbox"/>
11	KONG, JING, et al., "Functionalized carbon nanotubes for molecular hydrogen sensors," Advanced Materials, September 14, 2001, pgs. 1384-1386, Vol. 13, No. 18, Wiley-VCH, Verlag GmbH.	<input type="checkbox"/>
12	KUZUMAKI, TORU, et al., "Mechanical characteristics and preparation of carbon nanotube fiber-reinforced Ti composite," Advanced Engineering Materials, 2000, pgs. 416-418, Vol. 2, No. 7.	<input type="checkbox"/>
13	O'CONNELL, MICHAEL J., et al., "Band-gap fluorescence from individual single-walled carbon nanotubes," Science, July 26, 2002, pgs. 593-596, Vol. 297, www.sciencemag.org.	<input type="checkbox"/>
14	O'CONNELL, MICHAEL J., et al., "Reversible water-solubilization of single-walled carbon nanotubes by polymer wrapping," Chemical Physics Letters, 2001, pgs. 265-271, Elsevier.	<input type="checkbox"/>
15	SEEGER, T., et al., "Nanotube composites: novel SiO <sub>2</sub> coated carbon nanotubes," Chem. Commun., 2002, pgs. 1-5, Royal Society of Chemistry, Great Britain.	<input type="checkbox"/>
16	SEEGER, T. et al., "SiO <sub>x</sub> -coating of carbon nanotubes at room temperature," Chemical Physics Letters, 2001, pgs. 41-46, Vol. 339, Elsevier.	<input type="checkbox"/>
17	THESS, ANDREAS, et al., "Crystalline ropes of metallic carbon nanotubes," Science, July 26, 1996, pgs. 483-487, Vol. 273, Issue 5274, American Association for the Advancement of Science. U.S.	<input type="checkbox"/>
18	TSANG, SHIK CHI, et al., "Immobilization of platinated and iodinated oligonucleotides on carbon nanotubes," Angew. Chem. Int., Ed. Engl., 1997, pgs., 2198-2200, Vol. 36, No. 20, Wiley-VCH, Verlag GmbH.	<input type="checkbox"/>
19	Foreign communication from a related counterpart application, International Preliminary Examination Report, PCT/US02/37211, December 4, 2003, 31 pgs.	<input type="checkbox"/>
20	Foreign communication from a related counterpart application, Written Opinion, PCT/US02/37211, September 30, 2003, 5 pgs.	<input type="checkbox"/>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**  
( Not for submission under 37 CFR 1.99)

Application Number	10534431
Filing Date	2006-01-24
First Named Inventor	Andrew Barron
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.
Attorney Docket Number	1789-09703

If you wish to add additional non-patent literature document citation information please click the Add button

**EXAMINER SIGNATURE**

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> See Kind Codes of USPTO Patent Documents at [www.USPTO.GOV](http://www.USPTO.GOV) or MPEP 901.04. <sup>2</sup> Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>3</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language translation is attached.